practicing in America alone, not to mention North American.<sup>2</sup> Ernst suggests that there are a mere 5000.

Second, attempting to select literature that found chiropractic care to be ineffective, Ernst omits several key studies that were valid in their design. In a 10-year, multicenter trial, Meade found chiropractic care significantly more effective than medical care and physiotherapy for back pain patients with chronic or severe pain.<sup>3</sup> A follow-up study found favorable results a year later.<sup>4</sup> Multidisciplinary, government-based studies in the United States and Canada determined that spinal manipulation is effective for treatment of lower-back pain and costs substantially less owing to greater speed of recovery.<sup>5,6</sup>

Ernst is critical of chiropractic research that comprises more than spinal manipulation. However, many medical interventions that employ the use of medication are accompanied by instructions on diet and lifestyle to enhance effectiveness. Would the author have the same problem with a medical study that tested the effectiveness of a diabetes therapy that included a physician's home instructions to exercise? The truth is, providers often use more than a single intervention, and there is no reason to judge effectiveness exclusively on the basis of one method. If chiropractors render care that reduces pain and morbidity, then regardless of methodology, a positive outcome is realized. With humans as the subjects, that is often all one has to go on. In the case of the Agency for Health Care Policy and Research, spinal manipulation was recommended as the only treatment on the list of proven treatments that had to be administered by a doctor.<sup>5</sup>

As to safety of neck manipulation, Ernst states that "essentially everyone" receiving chiropractic care is at risk of an adverse event. This is true only to the extent that everyone treated by a medical physician is at risk of an adverse event. Haldeman, as recently as October 2001, found that "[t]he likelihood a chiropractor will be made aware of an arterial dissection following cervical manipulation is approximately 1:8.06 million office visits, 1:5.85 million cervical manipulations and 1:48 practice years." Let Ernst contrast that with surgical interventions to the neck.

While Ernst contends that risks may be hard to analyze, the known risk is extremely low when compared with risks of nonsteroidal antiinflammatory drugs (NSAIDs) for the same or similar problems. The *New England Journal of Medicine* called NSAID events a "silent epidemic," with an estimated 16 685 deaths a year attributed to these drugs. Coulter and Hurwitz state gastrointestinal events from NSAIDs to be 1000:1 million.<sup>8</sup>

Since the October issue of the Journal was dedicated to alternative and complementary medicine, it would seem appropriate to remind readers not to hold this provider community to standards any more rigorous than those applied to "standard" medicine. Eddy, a former thoracic surgeon, noted that "only 15% of medical interventions are supported by valid scientific evidence with many interventions never being assessed at all." So in all, many interventions, medical nor complementary, can't be assessed for accurate risks versus benefits. Patients are demanding alternatives. Let's not write any off until all have been tested properly, including both complementary and medical interventions.

Will Evans, DC

## **About the Author**

Requests for reprints should be sent to Will Evans, DC, 129 South Orange Ave, Eufaula, AL 36027 (e-mail: eslo419@aol.com).

## References

- 1. Ernst E. Chiropractic care: Attempting a risk-benefit analysis. *Am J Public Health* 2002; 92: 1603-1604
- 2. Job Analysis of Chiropractic: A Project Report, Survey Analysis and Summary of the Practice of Chiropractic Within the United States. Greeley, Colo: National Board of Chiropractic Examiners: 2000.
- 3. Meade TW, Dyer S, Browne W, Frank AO. Low back pain of mechanical origin: randomized comparison of chiropractic and hospital outpatient treatment. *BMJ.* 1990;300:1431–1437.
- 4. Koes B, Bouter LM. Randomized clinical trial of manipulative therapy and physiotherapy for conservative back and neck complaints: results of a one- year follow-up. *BMI*. 1992;304:601–605.
- Acute Low Back Pain in Adults: Assessment and Treatment. Washington, DC: US Dept of Health and Human Services; December 1994. AHCPR Publication No. 95-0643.
- 6. Manga P, Angus D. Enhanced Chiropractic Coverage Under OHIP as a Means of Reducing Health Care Costs, Attaining Better Health Outcomes and Improving the Public's Access to Cost Effective Health Services. Ottawa, Ontario: University of Ottawa; 1998.
- 7. Haldeman S, Carey P, Townsend M, Papadopoulos C. Arterial dissections following cervical manipula-

## CHIROPRACTIC CARE: ATTEMPTING A RISK-BENEFIT ANALYSIS

In his article about chiropractic care, <sup>1</sup> Ernst attempts to support a no-confidence vote disguised as a risk—benefit concern. Several aspects of Ernst's article need to be addressed. First, more than 50 000 doctors of chiropractic are

## LETTERS

tion: the chiropractic experience. Can Med J. 2001; 165:905-906.

- 8. Coulter ID, Hurwitz EL, et. al. The appropriateness of manipulation and mobilization of the cervical spine. Santa Monica, Calif: RAND; 1995. Document MR-781-CR.
- 9. Smith R. Where is the wisdom? The poverty of medical evidence. BMJ. 1991;303:798–799.